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ELSON, R.M.	
DUOLE, A.H.	
SHOP, M.L.	
RAINARD, B.	
INNODE, G.A.	
ARTMAN, J.	X
ELL, K.	
AROL, M.S.	
EBRIDE, M.H.	
IRAGENT, D.	
ITHERILL, U.F.	
JAMS, J.J.	
DERSON, T.W.	
BAUN, R.L.	
JEFFY, G.G.	
JEFFMAN, R.B.	
VERNIER, R.J.	
ICKHART, F.R.	X
IKOW, T.E.	
INGER, S.	
ISK, W.C.	
JSCITTO, D.G.	
JASSBURGER	X
J. KEN, K.T.	
J. IEL, T.	
J. REAVES, M.	
CKS, D.A.	
JEFFMAN, G.N.	
ALCHESKI, D.	
CCORMICK, M.S.	
ILLER, H.G.	
JTMEYER, R.M.	
JWTSCH, E.	
JSLUSZNY, J.	
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EECE, J.	
EDWARD, J.D.	
INDERPUY, M.	
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Memorandum

MAR 16 1993

EM-453.1 (A. Rampertaap, 3-8191)

Comments for Final Phase I Resource Conservation and Recovery Act Facility
Investigation/Remedial Investigation Work Plan, Operable Unit 7, December 1992

R. Schassburger, Rocky Flats Office

The Office of Southwestern Area Programs, Rocky Flats/Albuquerque Production Division (EM-453), has reviewed the "Draft Addendum to Final Phase I Resource Conservation and Recovery Act Facility Investigation/Remedial Investigation (RFI/RI) Work Plan, Operable Unit (OU) 7," December 1992, document and has prepared the attached comments for your consideration in preparing the final document. Please address these comments during the document finalization process. The draft form of these comments were faxed to you on March 3, 1993.

Our main concerns with the document are as follows:

1. The rationale for conducting the sampling described in this memorandum should be reviewed. Two objectives are provided, (1) to characterize the surface soils at the landfill, and (2) to characterize the asbestos disposal areas. This information is supposedly required for the Human Health Risk Assessment (HHRA); however, it is not clear why this information is required for the HHRA. If the landfill is currently operating in accordance with 40 Code of Federal Regulations (CFR) 265, 40 CFR 257, 40 CFR 61, and 40 CFR 763, and is closed in accordance with these requirements, assessing the human health risk of surface soils is unnecessary because the surface will be modified, (i.e., capped closure requirements for interim status landfills are specified in 40 CFR 265.310). Identification of the applicable requirements at the planning stages of an investigation is part of the Data Quality Objectives (DQOs) process. The planned capping allows the surface soil portion of the investigation to be eliminated. The relationship between the final remedy or landfill closure action that is required is a vital component effort. Only required information should be collected. The HHRA function is to be a component of the final decision process when it is known that the applicable requirements require specific actions. The HHRA process should be modified to supplement those requirements.
2. Sampling the surface soil in the method described in this memorandum would possibly be appropriate if the surface soil were potentially contaminated. The information provided in this memorandum and the OU 7 RFI/RI Work Plan clearly indicates that the surface soil material is cover material brought in from off the plant site. Because this is an active landfill, the surface soils of the landfill are constantly being changed. (A point discussed in this memorandum for not utilizing historical data, Section 2.1.2, p. 2, sixth paragraph). From the information provided, the concern would appear to be with the soil

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United States Government

Department of Energy

memorandum

DATE: MAR 16 1993

REPLY TO
ATTN OF: EM-453.1 (A. Rampertaap, 3-8191)

SUBJECT: Comments for Final Phase I Resource Conservation and Recovery Act Facility
Investigation/Remedial Investigation Work Plan, Operable Unit 7, December 1992

TO: R. Schassburger, Rocky Flats Office

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cover transported in from off-site. If this is the case then it would seem more appropriate to sample the soil pile before it is used as cover rather than after. The memorandum does not provide evidence or even question whether the cover material would be contaminated. If the cover material is in fact contaminated, then a new source of cover material should be located.

3. The sampling pattern provided appears inappropriate for determining the asbestos disposal trenches. The issue would seem to be whether the trenches had been breached and the potential exists for asbestos to be transported. If this is the case, the biased sampling where the disposal trenches are located would seem to be the best method to determine if a problem exists. To conduct this sampling the location of the disposal areas would need to be known. It is unclear from the memorandum how accurately these locations are known. The use of aerial photographs and geophysics methods may be useful in determining the locations of the trenches.

Please contact me at (301) 903-8191, if you have any questions regarding these comments.



Autar Rampertaap
Chief
Rocky Flats Branch
Rocky Flats/Albuquerque Production Division
Office of Southwestern Area Programs

Attachment

cc w/o attachment:
R. Greenberg, EM-453
J. Hartman, RF

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Chassburger

SECTION 3/22

DATE

LTR ENG

ELSON, R.M.
BUDLE, R.H.
ISHOP, M.L.
BARNARD, B.
ANNODE, G.R.
ARTMAN, J.
ZELL, K.
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DLINGER, S.
RASK, W.C.
RUSCITTO, D.G.
SCHASSBURGER
BRACKEN, K.T.
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HARGREAVES, M.
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PEWTSCH, E.
POLUSZNY, J.
RAMPE, J.
REECE, J.
STEWART, J.D.
UNDERPUY, M.
WALLIN, B.

Memorandum

MAR 18 1993

EM-453.1 (A. Rampertaap, 3-8191)

Review Comments for "Technical Memorandum Number 2, Human Health Risk Assessment, Operable Unit 7"; December 16, 1992, Rocky Flats Plant

R. Schassburger, Rocky Flats Office

The Office of Southwestern Area Programs, Rocky Flats/Albuquerque Production Division (EM-453), has reviewed the subject document and has prepared the attached comments for your consideration in preparing the final document. Please address these comments during the document finalization process.

We are particularly concerned that the conceptual model presented in this document does not appear to take into consideration the fact that the existing landfill at Operable Unit 7 will be closed as a Resource Conservation and Recovery Act (RCRA) unit. As such, it will incorporate RCRA closure design standards (e.g., an engineered cover, institutional controls, etc.) which will have effects on the modeling assumptions (e.g., surface soil contamination levels, potential for residential land use, etc.). We are also concerned that only limited representative data have been presented for the model in this technical memorandum, and there is no discussion of the limitations, assumptions, and/or uncertainties associated with the data presented.

Please contact me at (301) 903-8191 if you have any questions regarding these review comments.

Autar Rampertaap

Autar Rampertaap
Chief
Rocky Flats Branch
Rocky Flats/Albuquerque Product Division
Office of Southwestern Area Programs

Attachment

cc w/o attachment:
R. Greenberg, EM-453
J. Hartman, RF

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DATE: MAR 18 1993

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REPLY TO
ATTN OF: EM-453.1 (A. Rampertaap, 3-8191)

SUBJECT: Review Comments for "Technical Memorandum Number 2, Human Health Risk Assessment, Operable Unit 7"; December 16, 1992, Rocky Flats Plant

TO: R. Schassburger, Rocky Flats Office

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Please contact me at (301) 903-8191 if you have any questions regarding these review comments.



Autar Rampertaap
Chief
Rocky Flats Branch
Rocky Flats/Albuquerque Product Division
Office of Southwestern Area Programs

Attachment

cc w/o attachment:
R. Greenberg, EM-453
J. Hartman, RF

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EM-453.1 COMMENTS ON: TECHNICAL MEMORANDUM NUMBER 2 HUMAN HEALTH
RISK ASSESSMENT OPERABLE UNIT 7, DECEMBER 16, 1992
ROCKY FLATS PLANT

GENERAL COMMENTS

1. The conceptual model does not incorporate requirements that the present landfill must meet when it is closed under Resource Conservation and Recovery Act (RCRA) 40 Code of Federal Regulations (CFR) 265. The requirements are that a cover over the landfill to ensure that infiltration not take place would appear to make modeling of the landfill surface soils unnecessary. The cover requirements would also impact the potential for volatile organic gas release. The conceptual model should discuss the site specific areas that would have the potential for surface soil contamination, Individual Hazardous Substance Site 203, and the spray areas around the East Landfill Pond.
2. The conceptual model should incorporate the requirements for institutional control specified in 40 CFR 265 and additional control requirements for asbestos disposal areas. Those requirements would appear to make the residential scenario directly over the landfill an unrealistic scenario for this site.
3. This technical memorandum (TM) would have been more logically presented as an appendix to the earlier Exposure Assessment Technical Memorandum (EATM) Number 1. Fate and transport modelling are basically a part of the exposure assessment process. As it is, the first 40 or more pages of this document repeat material already presented in the EATM.
4. The Rocky Flats Interagency Agreement states in Section VII D.1.a, page 32, "In addition, the Department of Energy shall submit for review and approval a description of the fate and transport models that will be utilized, including a summary of the data that will be used with these models. Representative data shall be utilized and the limitations, assumptions and uncertainties associated with the models shall be documented." Limited representative data has been included in this TM and there is no discussion of limitations, assumptions, and uncertainties.
5. Critical media-sampling data is missing.
 - a. No site-specific data are provided for the potential methane generation capacity of the landfill material. The historical data should provide some information on this point. The waste materials described on page 1-5 would seem to have limited potential for methane generation.
 - b. For a Risk Assessment it is critical to have data for the non-methane organic compounds, but no data relating to the compounds present are given.

SPECIFIC COMMENTS

1. Section 1.2, page (p.) 1-4, second through fourth paragraphs: The addition of the information on the potential future uses for the Rocky Flats Plant should either be incorporated into the conceptual site model or deleted.
2. Section 1.3.2, p. 1-7, Last Paragraph: There are three different sets of terms used to refer to the same two ponds within one paragraph. Suggest that the pre-1974 designation as Pond Number 1 and Pond Number 2 be mentioned and then the current names, West Landfill Pond and East Landfill Pond should be used consistently throughout the document. Please clarify appropriately.
3. Section 1.3.3, p. 1-13: This section should discuss Operable Unit (OU) 7 specifically. In particular Figure 1-6, which is referred to as a surfical geology map and is in fact a stratigraphic column. A surfical geology map should be included. Also cross-sections should be included if possible.
- 0 4. Section 1.3.4.2, p. 1-19: The discussion on subsurface drainage in this section is interesting, but does not appear to relate to the scope of the document which is limited to air-borne problems from OU 7. Please clarify how this discussion is related to the objectives of the document or delete.
5. Section 1.3.6, p. 1-22: This section should attempt to discuss the flora and fauna in the OU 7 area.
6. Section 1.3.7, p. 1-28, third paragraph: It is recommended that a current land-use map be provided to support this discussion.
7. Section 1.3.7, p. 1-28, fourth paragraph: The first sentence should be modified to indicate that this refers to planned future land-use.
8. Section 2.1, p. 2-2, first paragraph: The future land-use scenarios should incorporate the closure requirements of RCRA for interim status landfills.
9. Section 2.1, p. 2-3, second paragraph: The definitions provided here do not match those provided in Figure 2-2. Please make consistent.
10. Section 3.0, p. 3-1, second paragraph: The definition of "model" as only referring to mathematical equations or computer codes is a limited definition. A component of a model is conceptual concepts such as Figures 2-3, and 2-4 which provide insight into exactly what needs to be mathematically modelled.

11. Section 3.2, p. 3-2, third paragraph: Please verify that the OU 7 RCRA Facility Investigation/Remedial Investigation is collecting the information discussed in this paragraph. Also, please verify by examination of the waste stream disposal records for the landfill that organic matter has been deposited in this landfill.
12. Section 3.3.2, p. 3-7, second paragraph: From the discussion here there is an implication that the Superfund Exposure Assessment Manual (SEAM) model cannot be applied without ground water contaminant data, which will not be collected until Phase II. Please verify if ground water data is required for this model.
13. Section 3.3.2, p. 3-7, sixth paragraph, last sentence: Please clarify the relationship of the soil gas transport model to remediation strategies. As presented here the relationship between the two systems is unclear.
14. Section 3.4.2, p. 3-10, first paragraph: Part of the text appears to have been omitted from the top of this page. Please revise.
15. Page 3-13, Table 3-2: Saturated vapor concentration data are needed as input parameters for the SEAM model, but the need for this data is not indicated in the table. Please indicate where this data will be obtained.
16. Page 3.14, Table 3-3: Surface soil concentrations of the contaminants are needed for the fugitive dust model.